

474+The relation between prevalence of atrial fibrillation with mitral valve area and diameter of left atrium in patients with mitral stenosis

ESC-ID 474
 Author Arezu Ghobadi
 Country Iran
 Co-Author Dr. Adalat Hosseini, Dr. Hossein Dostcami, Rahimeh Rasuli
 University Ardabil Azad University of Medical Sciences

Introduction: One of the relative prevalent heart diseases especially in young persons in developing countries is mitral stenosis. MS has many complications, which one of them is atrial fibrillation (AF), in which the rate of embolization is increased. We attempted to study the relation between AF with mitral valve area (MVA) and diameter of left atrium (LA) in these patients.

Materials and methods: We studied cardiac rhythm and LA diameter of 65 patients with MS via electro-cardiography and echocardiography and data of them collected in special forms and analyzed by SPSS software.

Finding: From 65 patients with MS, 46 patients (70.8%) were women and 19 patients (29.2%) were men, the mean age of all patients was 48/69 years while it was 48/95 and 47/73 years in women and men, respectively. 43 patients (66/15) had AF and 22 patients (33/85) had sinus rhythm. The mean age of patients with AF and sinus rhythm was 51/39 and 43/13 years, respectively. Among the studied cases only in 51 patients echocardiography was done, which from them 33 cases (64/7) had AF and 18 cases (35/3) had sinus rhythm, the mean diameter of LA in 51 cases was 4/84 cm while it was 5/12 and 4/33 cm in Patients with AF and sinus rhythm. The mean mitral valve area in patients with MS + AF and native mitral valve was 1/32 cm², while it was 1/24 cm² in patients with MS + sinus rhythm.

Conclusions: With respect to above acquired data, the prevalence rate of MS in women to men was 2.4/1. The mean age in men and women was similar. 66/15 of all patients had AF and 33/85 had sinus rhythm and the prevalence of AF to sinus rhythm was nearly twice, that this can be due to chronicity or severity of disease. The mean diameter of LA in patients with AF was significantly greater than patients with sinus rhythm (5/12 cm and 4/33 cm respectively) which this can indicate the effect of LA dilatation in AF generation. Also, in cases with MS + AF + native mitral valve, MVA was 1/32 cm², while it was 1/24 cm² in patients with MS + sinus rhythm + native valve which it was an unexpected result and may indicate that the MVA has little effect in AF generation.